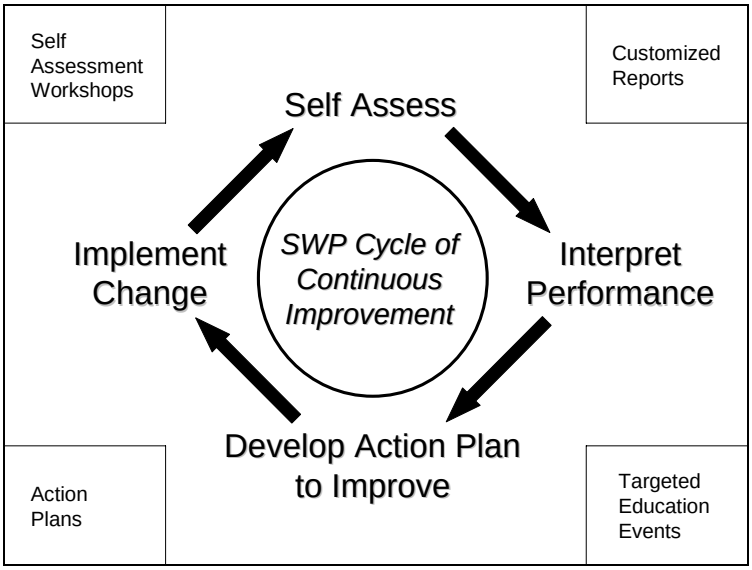
CALIFORNIA DEPARTMENT OF PESTICIDE REGULATION
INTEGRATED PEST MANAGEMENT ALLIANCE GRANT
FINAL REPORT

Grantee Name: California Sustainable Winegrowing Alliance
Project Title: Grape Pest Management Alliance – Application of a Self-Improvement Model and Performance Metrics to Reduce Pesticide Risks to Air and Water (Agreement No. 07-PML-G003)
Principal Investigator: Joe Browde **Phone Number: (**707) 776-4943 **E-Mail:** mjbrowde@pacbell.net
Period Covered by Report: January 22, 2008 – May 14, 2010
Project End Date: May 14, 2010

Summary of Project Activities:

This Grape Pest Management Alliance project has been a partnership between the California grape community and the California Department of Pesticide Regulation to enhance the adoption of economically viable farming practices that decrease pesticide risks to air and water. This goal was achieved by increasing winegrower use of the California Sustainable Winegrowing Program's voluntary self-improvement model (Figure 1), the "cycle of continuous improvement," while extending its use to raisin and table grape growers. Execution of this project constituted the first application of elements of the model outside of winegrapes. Project oversight was provided by the California Sustainable Winegrowing Alliance, a non-profit organization led by the California Association of Winegrape Growers and Wine Institute. Sun-Maid Growers and the Grape & Tree Fruit League were key members of the Management Team and championed the transfer of cycle elements to raisins and table grapes.

Figure 1. The Sustainable Winegrowing Program cycle of continuous improvement

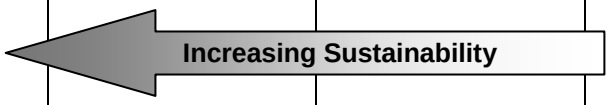


The "cycle of continuous improvement" consists of self-assessment, the interpretation of performance, action planning, and the implementation of change. The centerpiece is the *Code of Sustainable Winegrowing Practices Self-Assessment Workbook*, which covers a broad range of production practices over 14 chapters. Each chapter includes criteria (specific management areas) for evaluating practices

using a four-category measurement system (Table 1). Chapters with at least some criteria relevant to air and/or water impacts are viticulture, soil management, vineyard water management, pest management, ecosystem management, air quality, and neighbors and community. Reports are generated that enable participants to interpret and track their performance and the industry to publicly document its progress. Targeted education complements assessment and action planning by emphasizing areas needing improvement, according to analyses of assessment data. Many winegrower participants complete cycle elements by accessing the workbook content, the assessment and reporting software, educational resource links, and an action planning template through the Sustainable Winegrowing Program's online system (accessible via www.sustainablewinegroing.org).

Table 1. Criterion 16-6 from the Air Quality chapter exemplifying the four-category measurement system

AIR QUALITY				
Criteria	**Category 4**	**Category 3**	**Category 2**	**Category 1**
16-6 Pesticide Stewardship	I never use fumigants* ***And*** I follow recommended practices for dust (e.g., sulfur) and liquid applications to minimize PM10 and drift** ***And*** I am familiar with and avoid use of pesticides associated with higher VOC emissions (see **Box 16-13**) ***And*** Applicators are trained about pesticide issues relevant to air quality and training includes written material.	I never use fumigants* ***And*** I follow recommended practices for dust (e.g., sulfur) and liquid applications to minimize PM10 and drift** ***And*** I have some understanding of pesticide products associated with higher VOC emissions (see **Box 16-13**).	I only use fumigants to address verified biological problems* ***And*** I follow recommended practices for dust (e.g., sulfur) and liquid applications to minimize PM10 and drift**.	I choose and apply pesticides without considering impacts to air quality other than following legal requirements.



Grape Pest Management Alliance project objectives for applying the cycle to wine, raisin, and table grapes to decrease pesticide risks were: 1) analyze and interpret preexisting winegrower self-assessment data to rank relevant workbook criteria by educational priority, 2) extend information (targeted education) to promote adoption of cost-effective, lower-risk practices associated with prioritized criteria, and 3) document grower adoption of lower-risk practices and other project impacts (Attachment A). The collection and analysis of winegrower self-assessment data was important. These data were used to determine educational needs and to quantify (winegrapes) or indicate (raisin and table grape) progress. The following details activities by objective during the project, January 22, 2008 – May 14, 2010 (approximately 28 months).

Objective 1 – Analysis and interpretation of preexisting winegrower self-assessment data to rank workbook criteria relevant to reducing pesticide risks to air and/or water by educational priority.

(a) Identify criteria and associated practices for reducing pesticide risks to air and/or water (January 9 –

January 31, 2008).

This task was completed on schedule. A total of 56 workbook criteria that include practices for reducing pesticide risks to air and/or water were identified. Criteria were extracted from seven chapters – viticulture, soil management, vineyard water management, pest management, ecosystem management, neighbors and community, and air quality (Attachment B).

(b) Analyze statewide and regional assessment data for the identified criteria and rank criteria by educational priority (lower scoring and having most impact) (February 1 – March 31, 2008).

Analyses of winegrower assessment data and the corresponding ranking of criteria by grower performance were completed for California collectively, Central Valley, North Coast, and other winegrowing regions. Existing data had been collected from 674 vineyard organizations assessing 176,908 winegrape acres (33.9% of the statewide total) from November 2002 to April 2008. An earlier collected segment of this data (November 2002 to September 2004) had been analyzed and summarized to establish the industry's statewide initial benchmark performance and set future goals for improvement in the *California Wine Community Sustainability Report 2004*. To guide current educational priorities across all grape sectors for the Grape Pest Management Alliance project, the latter subset of data collected after release of the 2004 Report (October 2004 to April 2008) was sorted and analyzed to quantify updated state and regional averages for each pre-selected criterion. Criteria were ranked for both the state and each region by educational priority, i.e. lower scoring with associated practices deemed to most impact air and/or water quality. Differences in educational priorities among regions were expected and knowing them helped ensure that educational programs were designed to meet region-specific needs. Figures 2-4 display ranked criteria for the Central Valley.

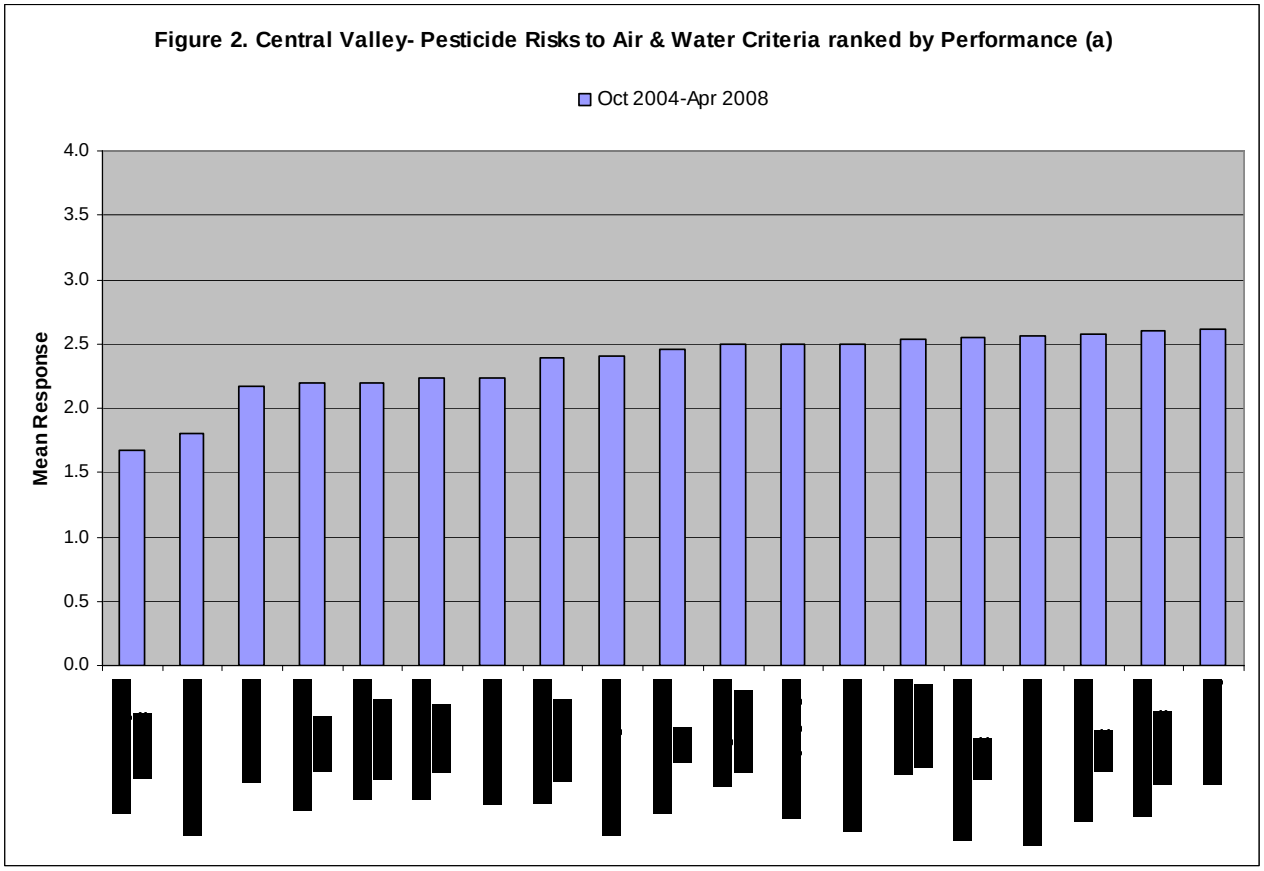


Figure 3. Central Valley- Pesticide Risks to Air & Water Criteria ranked by Performance (b)

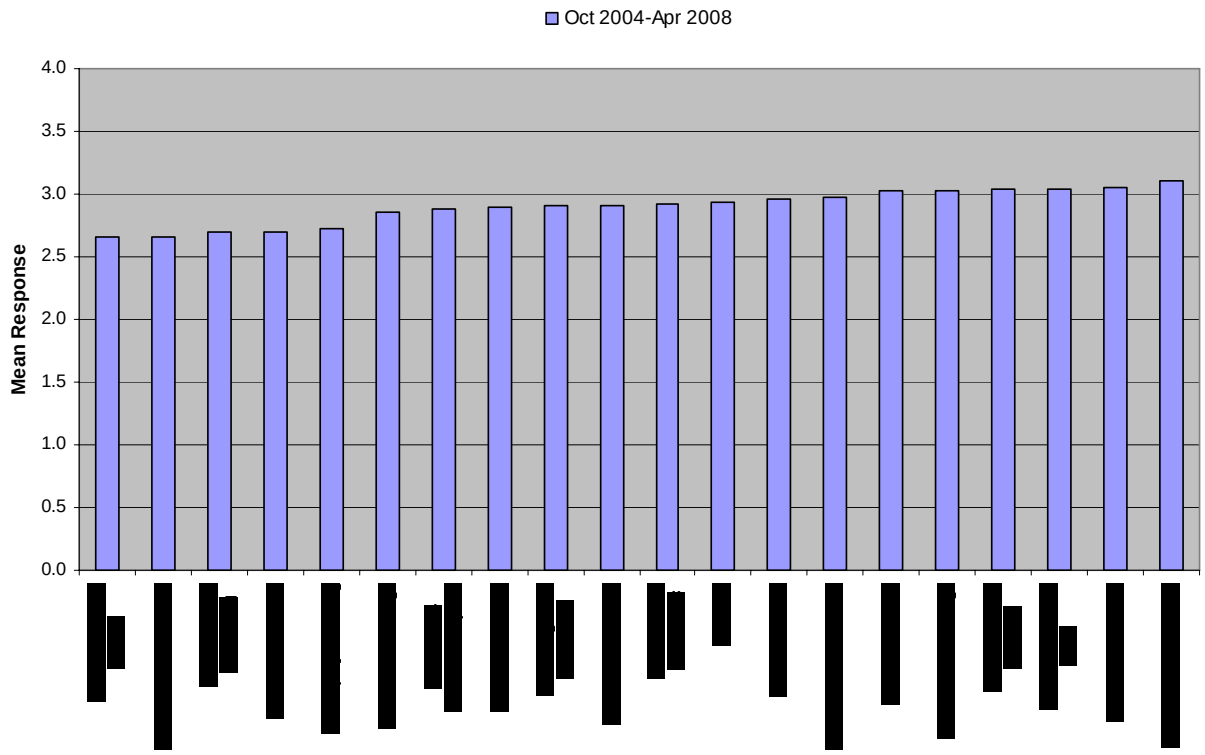
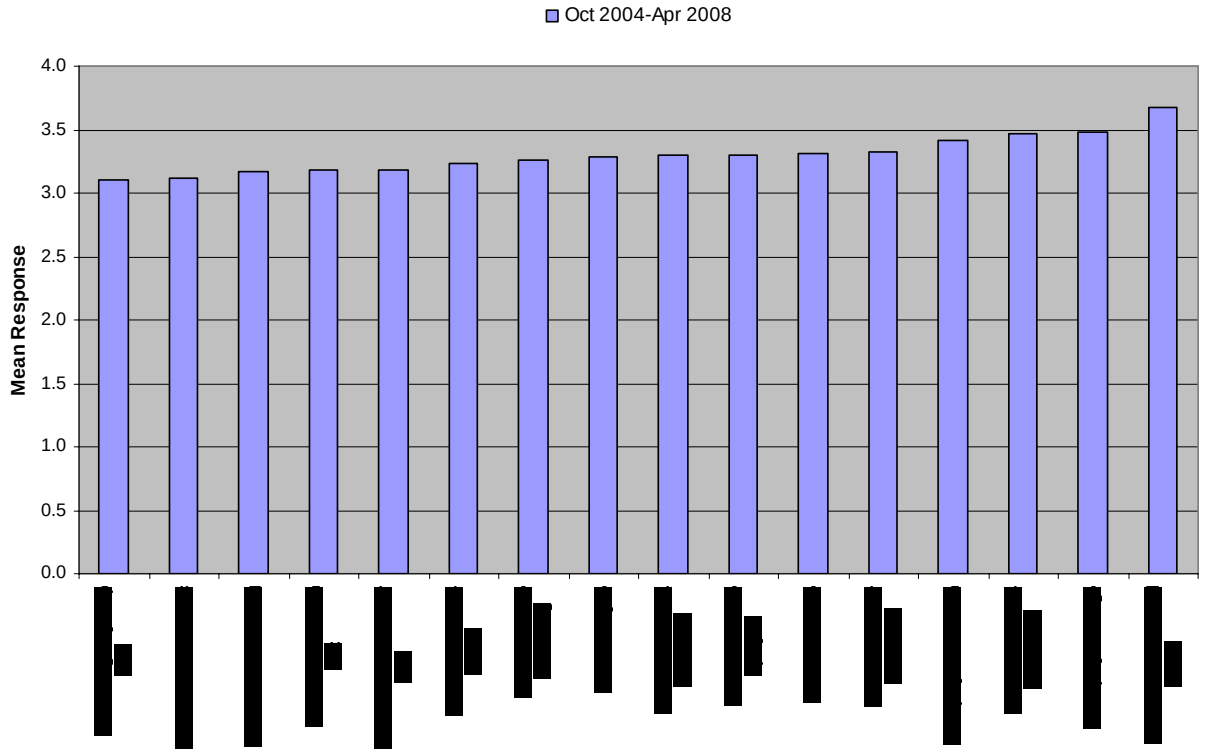


Figure 4. Central Valley- Pesticide Risks to Air & Water Criteria ranked by Performance (c)



Objective 2 – Extension of information (targeted education) to promote cost-effective adoption of lower-risk practices associated with prioritized criteria.

(a) Agree on regional educational targets (including emerging issues) with grower organizations (April 1 – September 30, 2008).

Throughout the course of the project, ranked criteria from self-assessment analyses were used as the basis for discussion and agreement about educational needs with regional winegrower leadership in the Central Valley, North Coast, and elsewhere, and with leadership from Sun-Maid Growers and the Grape & Tree Fruit League. Educational targets also were discussed with partners from UC Cooperative Extension, USDA-NRCS, pesticide and vineyard equipment companies, and other project partners. Many targets were determined via assessment data analyses but educational needs not covered in the Workbook or that were specific to certain regions (e.g., new pests and resistance issues) also were identified.

b) Collect and develop educational materials characterizing pesticide risks to air and/or water and protective practices for distribution to winegrape, raisin, and table grape growers and PCAs at events and via newsletters and websites (January 9 – December 31, 2008).

Numerous preexisting materials relevant to air and water protection were distributed widely at educational events. These materials include California Department of Pesticide Regulation handouts about air quality and pesticides, regional water board and water quality coalition publications, Coalition for Urban and Rural Environmental Stewardship pamphlets, USDA Natural Resources Conservation Service technical sheets, the trade articles *Improving Air Quality* (Practical Winery & Vineyard, 2007) and *Air Quality: The Latest Frontier for Sustainable Winegrowing* (CAPCA Adviser, 2007), and other pertinent compositions.

Project resource also was invested in producing and distributing the handbook, *Reducing Risks through Sustainable Winegrowing: A Growers' Guide*, which was completed in December 2008. The guide focuses on the relationship between sustainability and risk reduction by highlighting key practices from the *California Code of Sustainable Winegrowing Practices Self-Assessment Workbook*, an important risk management tool itself, and other sources that educate growers about risk mitigation. The intent was to clarify understanding that improvement along the continuum of sustainability by adopting practices detailed both in the guide and workbook is an effective risk-management strategy, enhancing the long-term viability of farming business.

The guide contains chapters covering the key risks and corresponding sustainable practices listed in Table 2. Three of the nine chapters directly address risks associated with pesticides and their mitigation – Assuring Water Quality, Protecting Air Quality, and Minimizing Pest-Related Risks. The guide was widely distributed at Grape Pest Management Alliance events and is freely available via www.sustainablewinegrowing.org.

Nearly finished relevant educational material includes work with the IPM Institute of North America and UC Davis to customize their respective online pesticide risk evaluation tools (PRiME for IPM Institute and PURE for UC Davis) for application by California grape growers. These tools will enable growers and pest control advisors to better understand risks associated with pesticides and make informed decisions before use. The Grape Pest Management Alliance has supported the development of these tools, which will be applied soon after project termination.

Table 2. Key risks to California winegrowing and associated mitigation (sustainable practices)

Risks to California Winegrape Production	**Mitigation (Sustainable Practices)**
Water scarcity	Water conservation & efficiency
Impaired quality of water	Water quality protection
Decreased quality of soil	Soil conservation & management
Diminished air quality/climate change	Air quality protection
Increased cost of labor	Human resource management
Rising cost of energy	Energy conservation & efficiency
Outbreaks of pests	Integrated pest management
Aberrant weather	Weather monitoring & preventive planning
Unexpected market challenges	Selection of appropriate insurance policies & tools and proactive business planning & management

(c) Establish and enhance 10+ demonstration vineyards with grower-cooperators and site spokespersons (April 1, 2008 – March 31, 2009).

Twenty three demonstration vineyards (wine, raisin, and table grapes) were established across California's winegrowing regions (Table 3) and used as venues and models for showcasing and discussing vineyard practices related to reduced-risk pest management. Of these, 16 were established in the Central Valley, 5 in the North Coast, and 2 in the San Francisco Bay region. Displayed technologies and practices corresponded to those detailed as more sustainable in the workbook. The number of demonstration sites increased over time to ensure a wide geographical distribution of sites, increase the diversity of practices/technologies shown, and maximize project exposure and impact.

Table 3. Targeted education events and demonstration vineyards by region

Region	**Events**	**Demo Vineyards**
Central Valley (multi-sector)	26	16
North Coast	19	5
San Francisco Bay	3	2
South Coast	1	0
Total	**49**	**23**

(d) Conduct 20+ targeted education events (field meetings at demonstration vineyards, workshops, and seminars) for grape growers and PCAs in all grape-growing regions (April 1, 2008 – December 31, 2009).

Forty nine targeted education events involving reduced-risk pest management, including those at demonstration vineyards, were conducted over the course of the project (Table 3; see Attachment C for specifics). By region, 26 occurred in the Central Valley, 19 in the North Coast, 3 in the San Francisco Bay, and 1 in the S Coast. Estimated attendance was 2,226, mostly growers (wine, raisin, table grape, and other crops) and pest control advisors. Topics included discussion and/or displays of integrated pest management strategies and tactics, characterizations of reduced-risk pesticides (including volatile organic compound emission potentials), judicious management of vine mealybug, status and concerns for light brown apple moth and European grapevine moth, management of plant-parasitic nematodes, environmentally friendly weed management, customized cover cropping and other vegetative enhancements, air-and water-related regulations, spray liability issues and insurance, low-drift sprayers, relevant incentive programs for improving practices (e.g., EQIP), organic farming requirements, and on-site reduced-risk practices.

The numerous partners involved in extending information at events included experienced growers, pest control advisors, agricultural consultants, grower association leads, UC Cooperative Extension, USDA-NRCS, private companies, and government agencies.

Objective 3 – Documentation of grower adoption of lower-risk practices relevant to pesticides and air and/or water quality and other project impacts.

(a) Conduct winegrower self-assessments against the criteria relevant to pesticide risks and air and/or water to quantify improvements in performance for winegrowers (October 1, 2008 – February 28, 2010).

Grape Pest Management Alliance resource supported the conduct of 29 self-assessment workshops for winegrowers throughout California. Workshops included assessments against all criteria in the *Code of Sustainable Winegrowing Practices Self-Assessment Workbook*, including the 56 pre-selected criteria relevant to pesticide risks to air and/or water. Collected data were pooled with the existent October 2004 to April 2008 subset for purposes of quantifying progress since the initial benchmarks published in the *California Wine Community Sustainability Report 2004*.

(b) Design and conduct a survey of raisin and table grape growers to cross-reference adoption of lower-risk practices (November 1, 2009 – February 28, 2010).

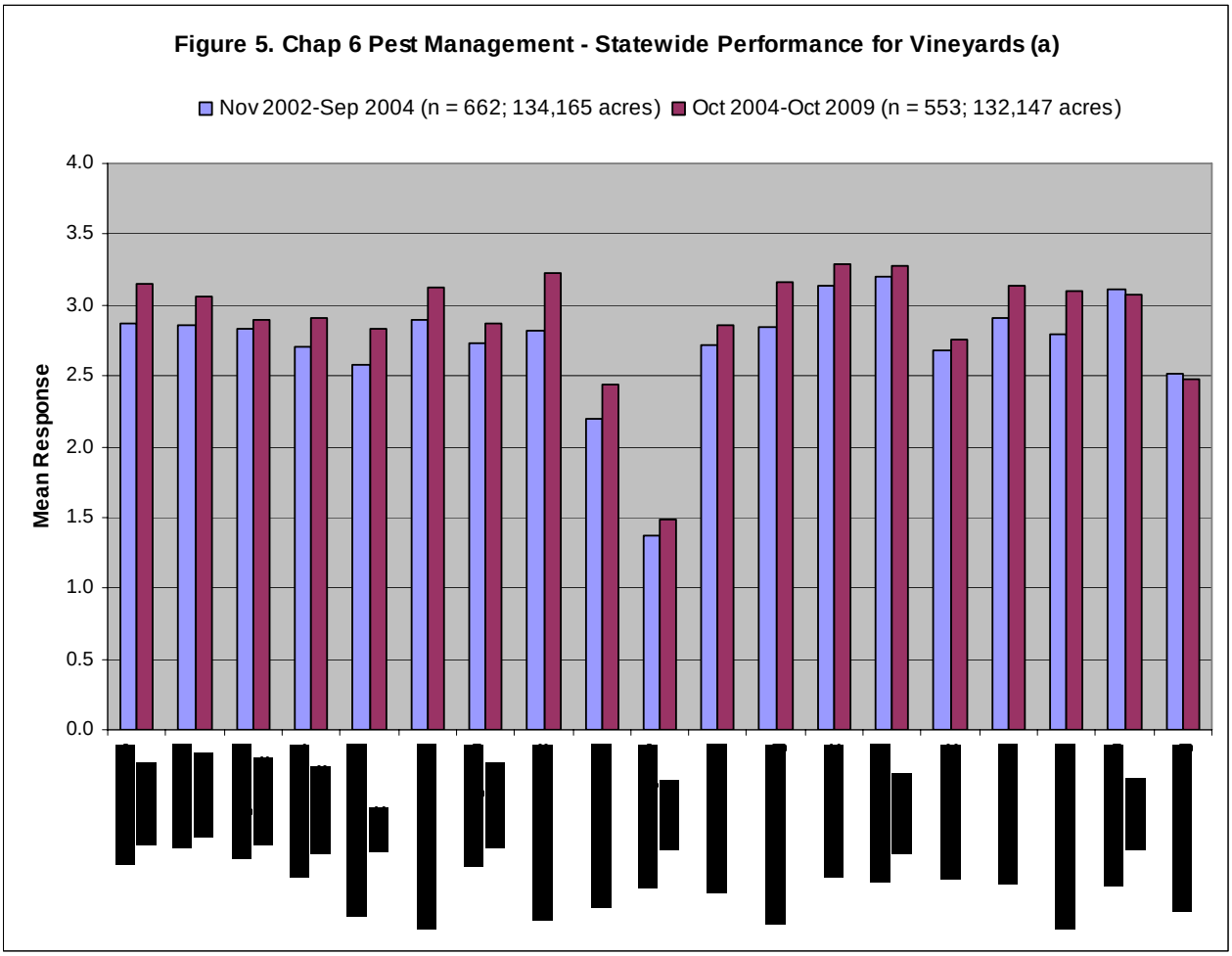
Originally envisioned as a Survey Monkey tool, the survey for raisin and table grapes growers ultimately was designed as a paper-based, self-assessment exercise by Grape Pest Management Alliance contractor SureHarvest. Although this task was completed, implementation of the assessment remains under consideration by leadership at Sun-Maid Growers and Grape & Tree Fruit League. Execution of the assessment or a related version is expected to occur after termination of this project, especially since SureHarvest has secured additional funding to progress sustainability initiatives in California specialty crops including raisins and table grapes.

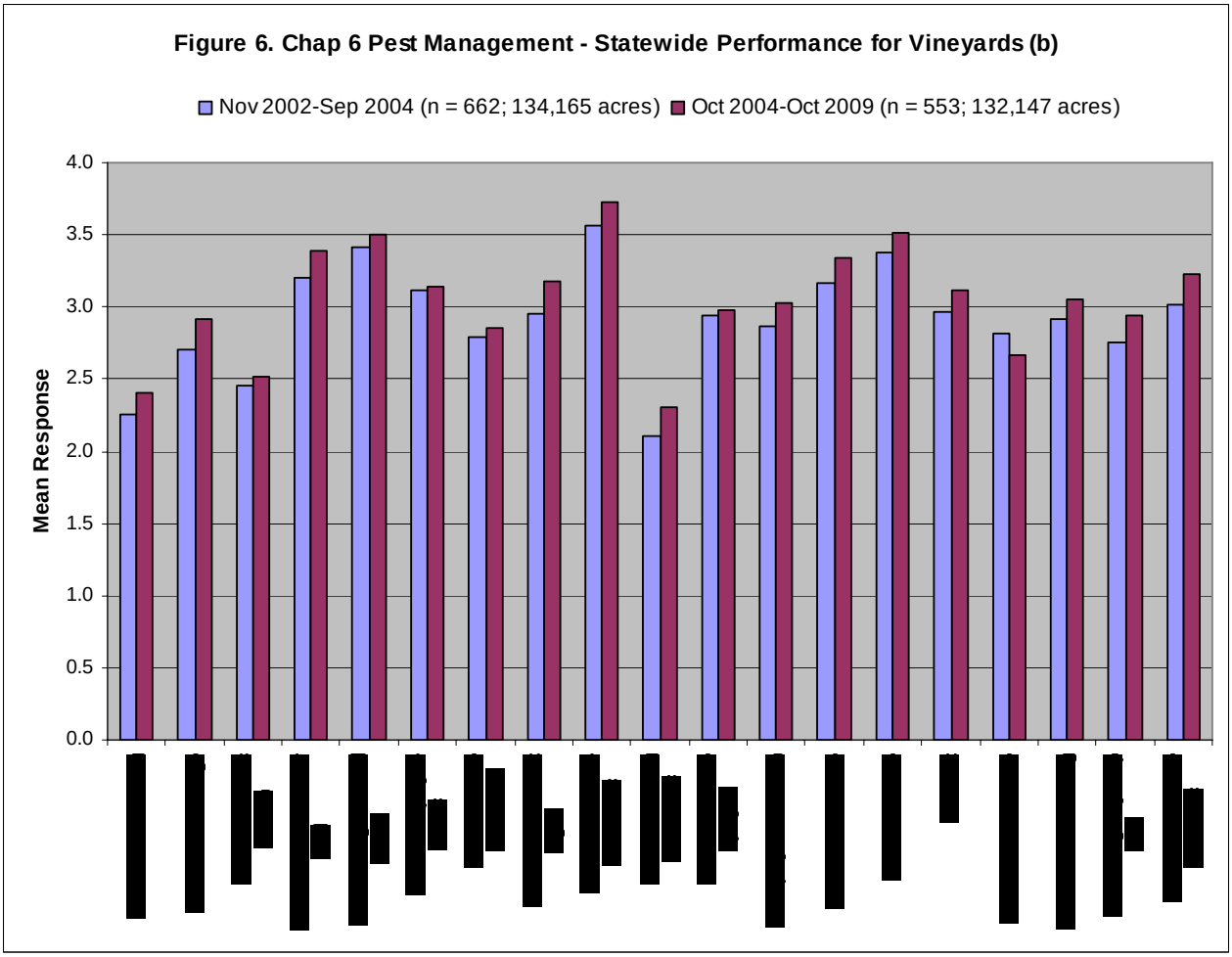
(c) Analyze and interpret assessment (winegrower) and survey (raisin and table grape growers) results to quantify and cross-reference adoption of lower-risk practices pertinent to pesticides and/or water quality (March 1- 31, 2010).

A thorough analysis of assessment data was done to document project impacts on grower performance by comparing initial benchmark data collected from November 2002 to September 2004 (n = 662 vineyards/blocks over 134,165 acres) with that collected from October 2004 to October 2009 (n = 553 vineyards/blocks over 132,147 acres). Statewide, grower performance increased for 50 of the 56 pre-selected criteria (89%) pertinent to pesticides and air and/or water quality, including 35 of 38 for the pest management chapter (Figures 5 & 6 display results for the pest management chapter).

Moreover, greater increases were noted for many criteria that include practices addressed during targeted education events – pest monitoring; use of economic thresholds; reduced-risk pesticides; cultural pest controls; predatory mite releases; weed monitoring, knowledge, and treatment decision making; buffer zones; and drift management.

Importantly, these increases reflect the impact of the Grape Pest Management Alliance project, related Sustainable Winegrowing Program activities, and regional initiatives on the continual adoption of reduced-risk pest management practices by California winegrowers. Although similar assessment information was not collected from raisin and table grape growers, the fact that educational activities were directed to all grape growers and pest control advisors strongly implies that similar progress occurred for these and likely other specialty crop sectors. Results advocate the usefulness of the California Sustainable Winegrowing Program's "cycle of continuous improvement" as a model for positively affecting grower behavior.





(d) Produce and disseminate commodity specific reports documenting the project and achievements in reducing pesticide risks in winegrape, raisin, and table grape production (March 1 – April 30, 2010).

Project activities and results were published in the widely disseminated *2009 California Wine Community Sustainability Repor*t (available at www.sustainablewinegroing.org). Other than that described here, commodity specific reports detailing sustainability initiatives and achievements for raisin and table grapes, including for reduced-risk pest management, are expected later after related projects commence.

Significant Project Results

Key achievements during January 2008 to May 2010 for the Grape Pest Management Alliance project are listed below.

- Identified 56 criteria and associated practices from 7 chapters of the Sustainable Winegrowing Workbook pertinent to reducing pesticide risks to air and/or water (Objective 1).
- Analyzed winegrower self-assessment data for identified criteria and ranked them by grower performance for the state and selected regions (e.g., Central Valley and North Coast) (Objective 1).
- Used ranked criteria to support discussion and agreement with regional winegrower leadership on educational priorities (Objective 2).
- Collected and composed educational material (e.g., handouts, brochures, instructional guides, articles, power point presentations) pertinent to reducing pesticide risks to air and/or water (Objective 2).

- Established 23 demonstration vineyards (16 Central Valley, 5 North Coast, and 2 San Francisco Bay) as venues and models to showcase reduced-risk practices (Objective 2).
- Conducted 49 targeted education events attended by 2,226 grape growers and pest control advisors (26 Central Valley, 19 North Coast, 3 San Francisco Bay, and 1 South Coast) with partners that included displays and topics based on agreed priorities (Objective 2).
- Facilitated 29 self-assessment workshops that included assessment against the 56 pre-selected criteria (Objective 3)
- Designed and composed a self-assessment exercise pertinent to reduced-risk pest management for raisin and table grape growers (Objective 3)
- Documented improved winegrower performance statewide for 50 of the 56 pre-selected criteria, with project achievements captured in the published and widely disseminated *2009 California Wine Community Sustainability Repor*t.

References

Browde, J. 2007. *Improving Air Quality*. Practical Winery & Vineyard.

Browde, J. 2007. *Air Quality: The Latest Frontier for Sustainable Winegrowing*. CAPCA Adviser.

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The California Sustainable Winegrowing Alliance. San Francisco, CA. www.sustainablewinegrowing.org

California Wine Community Sustainability Report. 2004. California Sustainable Winegrowing Alliance.

California Wine Community Sustainability Report. 2009. California Sustainable Winegrowing Alliance.

Code of Sustainable Winegrowing Practices Self-Assessment Workbook. 2nd Edition. 2006. California Sustainable Winegrowing Alliance, Wine Institute, and California Association of Winegrape Growers.

Reducing Risks through Sustainable Winegrowing: A Growers' Guide. 2008. California Sustainable Winegrowing Alliance.

The Wine Institute. San Francisco, CA. www.wineinstitute.org.

Attachment A – Objectives and Tasks for *California Grape Alliance – Application of a Self-Improvement Model and Performance Metrics to Reduce Pesticide Risks to Air and Water* (January 2008 – April 2010). Start and end dates per task are noted.

	Q1 2008	Q2 2008	Q3 2008	Q4 2008	Q1 2009	Q2 2009	Q3 2009	Q4 2009	Q1 2010	Apr 2010
Objective 1: Analysis and interpretation of preexisting winegrower self-assessment data to rank relevant workbook criteria for education										
(a) Identify criteria and associated practices for reducing pesticide risks to air and/or water	Jan1 Jan31									
(b) Analyze statewide and regional assessment data for the identified criteria and rank criteria by educational priority (lower scoring and most impact)	Feb1 Mar31									
Objective 2: Extension of targeted information to promote cost-effective adoption of lower-risk practices associated with prioritized criteria										
(a) Agree on regional educational targets (including emerging issues) with grower organizations		Apr1	Sep30							
(b) Collect and develop educational materials for characterizing and reducing pesticide risks to air and/or water for widespread distribution to growers	Jan1			Dec31						
(c) Establish and enhance 10+ demonstration vineyards (with grower spokespersons)		Apr1			Mar31					
(d) Conduct 20+ targeted education events (field meetings, workshops, and seminars) for grape growers and PCAs in all grape-growing regions		Apr1						Dec31		
Objective 3: Documentation of adoption of lower-risk practices relevant to reducing risks to air and/or water and other project impacts										
(a) Conduct winegrower self-assessments against the criteria relevant to pesticide risks and air and/or water				Oct1					Feb28	
(b) Design and conduct a survey of raisin and table grape growers to cross-reference adoption of targeted lower-risk practices								Nov1	Feb28	
(c) Analyze assessment (winegrower) and survey (raisin and table grape growers) data to determine statewide and regional progress									Mar1 Mar31	
(d) Produce and disseminate commodity specific reports documenting the project and achievements in reducing pesticide risks									Mar1	Apr30
Objective 4: Key grant administration activities										
(a) Hold post-grant acceptance meeting with the Management Team to review and advance objectives and tasks	during Jan									
(b) Conduct quarterly meetings with the Management Team to review progress and advise next steps		during Apr	during Jul	during Oct	during Jan	during Apr	during Jul	during Oct	during Jan	
(c) Produce and submit semiannual progress reports and the final report to DPR			by Jul31		by Jan31		by Jul31		by Jan31	***final by May14***
(d) Produce and submit reimbursement materials to DPR on a quarterly basis		by Apr30	by Jul31	by Oct31	by Jan31	by Apr30	by Jul31	by Oct31	by Jan31	***final by May14***

Attachment B – SWP Criteria including Practices re: Reducing Pesticide Risks to Air and Water

Chapter 3 – Viticulture

3-11 Soil Sampled for Biological Problems Pre-Planting
3-12 Addressing Biological Problems
3-13 Rootstocks

Chapter 4 – Soil Management

4-12 Non-Point Source Pollution Prevention
4-14 Cover Crops and Soil Quality
4-15 Choice of Cover Crop

Chapter 5 – Vineyard Water Management

5-03 Off-Site Water Movement

Chapter 6 – Pest Management

6-01 Vineyard Monitoring for Insects and Mite Pests
6-02 Economic Thresholds and Pest-Natural Enemy Ratios for Leafhoppers, Mites, and Thrips
6-03 Use of Broad-Spectrum/Long-Residue Insecticides and Miticides
6-04 Use of Reduced-Risk Insecticides and Miticides
6-05 Cultural Practices for Insect and Mite Management
6-06 Dust Abatement in and Around Vineyards for Mite Management
6-07 Use of Weather Data and Degree-Days for Managing Moth Pests
6-08 Portion of Vineyard Treated for Mites or Leafhoppers
6-09 Training of Employees
6-10 Releasing Predatory Mites
6-11 *Pseudococcus* Mealybugs
6-12 Vineyard Monitoring for Disease
6-13 Powdery Mildew Management
6-14 Use of Reduced-Risk Fungicides for Powdery Mildew and Botrytis Control
6-15 Canker Management: A. Eutypa Dieback, B. Bot Canker
6-16 Botrytis Management
6-17 Identification of Causal Agent of Bunch Rot
6-18 Pierce's Disease Management where Blue-Green Sharpshooter is Primary Vector
6-19 Glassy-Winged Sharpshooter Monitoring
6-20 Vineyard Monitoring for Weeds
6-21 Weed Knowledge
6-22 Herbicide Choice and Rate in Relation to Environmental Impacts
6-23 Herbicide Leaching Potential and Movement in Surface Water
6-24 Timing of Herbicide Treatments for Perennials
6-25 Area Treated with Herbicides
6-26 Vineyard Monitoring for Vertebrate Pests
6-27 Vertebrate Pest Management
6-28 Area of Vineyard Treated for Vertebrate Pests
6-29 Predation by Vertebrates
6-30 Low-Volume Vine Canopy Sprayers
6-31 Sprayer Calibration and Maintenance
6-32 Spray Coverage
6-33 Buffer Zone
6-34 Drift
6-35 Pesticide Storage
6-36 Pesticide Mixing and Loading
6-37 Pesticide Emergency Response Plan

6-38 Restricted-Use Materials

Chapter 8 – Ecosystem Management

8-03 Ecosystem Processes - Water Cycle
8-08 Watershed Management
8-09 Enhancing Habitat Through Vegetation Management in and Around the Vineyard
8-10 Habitat Enhancement - Nest Boxes for Wildlife that Prey on Vineyard Pests
8-14 Ecosystem Management - Riparian Habitat
8-15 Ecosystem Management - Aquatic Habitats: Streams, Rivers, and Wetlands
8-18 Use of Pesticides Toxic to Terrestrial and Aquatic Wildlife

Chapter 15 – Neighbors and Community

15-09 Agricultural and Winery Chemicals
15-12 Air Quality

Chapter 16 – Air Quality

16-05 Pest Management Strategy
16-06 Pesticide Stewardship

Attachment C – Targeted Education Events and Associated Demonstration Vineyards

Date	Venue	County	Demo Vineyard	Est. Attendance
03/04/08	Cacciatore Winery	Tulare	Yes	25
03/05/08	Quady Vineyards	Madera	Yes	39
03/06/08	Wend-Tyler Vineyards	Stanislaus	Yes	24
03/20/08	Ceago Vinegarden	Lake	Yes	72
05/06/08	Cacciatore Winery	Tulare	Yes	24
05/07/08	Saviez Farms	Fresno	Yes	39
05/08/08	McManis Family Vineyards	San Joaquin	Yes	28
07/08/08	Laguna Ranch	Sonoma	Yes	26
07/09/08	Barricia Vineyards	Sonoma	Yes	21
07/10/08	Rued Vineyards	Sonoma	Yes	11
07/10/08	Jordan Vineyards	Sonoma	Yes	25
07/31/08	Ridge Vineyards	Santa Clara	Yes	32
11/18/08	Grape & Raisin Expo	Fresno		180
12/11/08	CSU-Fresno	Fresno		41
12/11/08	Portuguese Hall	Fresno		125
03/10/09	Cacciatore Winery	Tulare	Yes	22
03/11/09	San Joaquin Wine Company	Madera	Yes	48
03/12/09	Yonan Farms	Stanislaus	Yes	31
04/28/09	Wilson Ag	Kern	Yes	19
04/29/09	James Unti Farms	Madera	Yes	34
04/30/09	Duarte Ranch	Stanislaus	Yes	24
06/09/09	Laguna Ranch	Sonoma	Yes	31
06/10/09	Barricia Vineyards	Sonoma	Yes	19
06/11/09	Rued Vineyards	Sonoma	Yes	25
06/11/09	Jordan Vineyards	Sonoma	Yes	21
06/18/09	Armenian Community Ctr	Fresno		80
06/30/09	Lange Twins Wine Estates	San Joaquin	Yes	75
07/14/09	South Coast Winery	Riverside		20
08/04/09	Brutocao Schoolhouse Plaza	Mendocino		90
08/06/09	Santa Rosa JC Shone Farm	Sonoma		150
11/13/09	Blue Lakes Lodge	Lake		99
12/04/09	Benziger Winery	Sonoma		33
01/07/10	Deer Ridge Vineyards	Alameda	Yes	32
01/18/10	Santa Rosa JC Shone Farm	Sonoma		71
01/19/10	Lodi Grape Festival Grounds	San Joaquin		75
01/20/10	CSU-Fresno	Fresno		52
03/09/10	ASV Wines	Kern		47
03/10/10	Mission Bell Winery	Madera		54
03/11/10	McManis Family Vineyards	San Joaquin	Yes	41
03/31/10	Big Valley Grange	Lake		28
04/09/10	Rominger Farms	Yolo	Yes	50
04/13/10	Rued Vineyards	Sonoma	Yes	22
04/13/10	Jordan Vineyards	Sonoma	Yes	21
04/14/10	Barricia Vineyards	Sonoma	Yes	20
04/15/10	Laguna Ranch	Sonoma	Yes	48

Date	Venue	County	Demo Vineyard	Est. Attendance
04/20/10	Deer Ridge Vineyards	Alameda	Yes	41
04/27/10	Equinox Tree & Vine	Tulare	Yes	20
04/28/10	Ranch Holdings 5	Madera	Yes	46
04/29/10	Jackson-Rodden Ranches	Stanislaus	Yes	25

Attachment D – Agendas for Grape Pest Management Alliance Events

March 2008 Winegrape Tailgate Meetings

Sponsored by Central California Winegrowers & California Sustainable Winegrowing Alliance
Funded in part by grants from the United States Department of Agriculture Risk Management Agency & California Department of Pesticide Regulation

Similar 9:00 a.m. – noon meetings conducted in Pixley, Madera, and Modesto

Tuesday, March 4	Cacciatore Fine Wine & Olive Oil Plant 1875 S Elm St, Pixley, CA 93256
Wednesday, March 5	Quady Winery & Vineyard 13181 Rd 24, Madera, CA 93637
Thursday, March 6	Wend-Tyler Winery & Vineyard 8737 Shoemake Ave, Modesto, CA 95358

AGENDA (identical per date/location)

9:00 a.m.	**Registration and Overview: What's Going On with CCW** Peter Vallis, Central California Winegrowers
9:15 – 9:30 a.m.	**Sustainability and You: How San Joaquin Valley Winegrowers are Leading the Way for a Better Grape-Growing Future** Joe Browde, California Sustainable Winegrowing Alliance
9:30 – 10:00 a.m.	**Air Resources: Regulations and Protective Practices** Johnnie Siliznoff, USDA-Natural Resources Conservation Service
10:00 – 10:30 a.m.	**Plant-Parasitic Nematodes and Grapes: Status and Management** Mike McKenry, University of California Cooperative Extension
Break	
10:35 – 10:55 a.m.	**Grape Market Update: Why It's Looking Better** Allied Grape Growers
10:55 – 11:15 a.m.	**Business Planning Issues affecting Your Ranch** United Valley Insurance Company
11:15 – 11:30 a.m.	**Host Grower Presentation – On-Site Practices for Quality Winegrowing**
11:30 – Noon	**Equipment Demonstration: Environ-Friendly Pest Management** Fresno Equipment Company/John Deere

FREE LUNCH

2.0 Hours of Continuing Education Credits for Pesticide Applicators and PCAs

To RSVP or for more information contact Central California Winegrowers at:
559-618-1856 or rbron@ccwinegrowers.org

Lake County Organic Winegrowing Seminar

March 20, 2008

Ceago Vinegarden
5115 East Highway 20 • Nice, California

8:00 am	**Registration and Continental Breakfast**
8:25 am	**Welcome and Introduction:** *Shannon Gunier, Executive Director, Lake County Winegrape Commission; Jim Fetzer, Owner, Ceago Vinegarden*
8:30 am	**Alternative Winegrowing Systems and Wine in the Organic Market Place:** *Ann Thrupp, Manager of Sustainability, Fetzer Vineyards, Hopland*
9:00 am	**Becoming Organic– Registration and Certification:** *Lars Crail, Grower, Yoxagoi Land Management, Kelseyville*
9:30 am	**CCOF Foundation's Going Organic Project and the OSP:** *Fred Thomas, CCOF Foundation and CERUS Consulting, Chico*
10:00 am	**BREAK**
10:15 am	**Organic Vineyard Management Practices: Soil Fertility, Vineyard Floor Management and Viticulture:** *Glenn McGourty, Farm Advisor, UCCE Lake County*
11:00 am	**Pest and Disease Management:** *Mike Boer, PCA, Ag Unlimited, Ukiah; Lucia Varela, UCCE Area IPM Advisor; Glenn McGourty*
12:00 noon	**A VERY FINE ORGANIC LUNCH:** Enjoy a salad of organic greens, fresh bread, and hearty beef or vegetarian stew cooked over the fire in Ceago's Great Room. The meal features local biodynamic, organic and sustainably produced foods.
1:00 pm	**Tour of Ceago Vinegardens** with Jim Fetzer.
2:00 pm	**Lake County Organic Winegrower Panel: Successes and Challenges:** *Moderator: Chris Sawyer, journalist. David Weiss, Monte Black and Lars Crail, Lake County Organic Growers*
2:30 pm	**Organic Farming and the Implication for Wine Quality:** *Ginny Lambrix, Winemaker and Director for Jim Ball Vineyards, Philo*
3:00 pm	**Organic Wine tasting and Vendor show:** Taste some great organic wines and visit with Vendors who will be on hand to display their organic products.

TO REGISTER: Mail, Fax, Phone, the Lake County Winegrape Commission: PO Box 877 Lakeport. CA 95453 (707) 995-3421 • FAX (707) 995-3618 • shannong@lakecountywinegrape.org

_____ ***Yes,*** I would like to attend the Lake County Organic Winegrowing Workshop

Name: _____ Phone: _____

Vineyard Name: _____ email address: _____

FEES: $25 for LCWGC Members, $35 for non-members
SPACE IS LIMITED, Please Register Early
Registration Deadline: March 17th

May 2008 Winegrape Tailgate Meetings

Sponsored by Central California Winegrowers & California Sustainable Winegrowing Alliance
Funded in part by grants from United States Department of Agriculture Risk Management Agency & California Department of Pesticide Regulation

Tuesday, May 6	Cacciatore Fine Wine & Olive Oil Plant 1875 S Elm St, Pixley, CA 93256
Wednesday, May 7	Saviez Farms 6695 N Dickenson Ave, Fresno, CA 93722
Thursday, May 8	McManis Family Vineyards - River Junction Ranch 30000 Two Rivers Rd, Manteca, CA 95337

AGENDA (identical per date)

9:00 a.m.	**Registration and Overview – Reducing Risk** Peter Vallis, Central California Winegrowers Joe Browde, California Sustainable Winegrowing Alliance
9:15 – 9:35 a.m.	**Grape Marketing and You** Jeff Bitter, Allied Grape Growers
9:35 – 9:55 a.m.	**Spray Liability – Issues and Insurance** Keri Hennesay and Elsa Lara, United Valley Insurance Company
9:55 – 10:25 a.m.	**Worker Heat Stress Prevention and Regulations** Amalia Neidhardt, Cal/OSHA
Break	
10:30 – 11:10 a.m.	**Maintaining Irrigation Systems for Maximum Efficiency** Cal West Rain **Testing Efficiency of Your Drip System** Steven Neil, California AgQuest Consulting
11:10 – 11:20 a.m.	**Vineyard Practices for Pest Management and Quality Winegrowing** Host Grower
11:20 – Noon	**Reduced-Risk, Cost-Effective Pest Management** Movento® Insecticide (vine mealybug), Bayer Crop Science Enviromist Sprayer Technology, BUBCO, Inc.

FREE LUNCH provided by Rain & Hail Insurance Company

1.5 Hours of Continuing Education Credits for Pesticide Applicators and PCAs

To RSVP or for more information contact Central California Winegrowers at:
559-618-1856 or rbron@ccwinegrowers.org

SUSTAINABLE WINEGROWING Targeted Education WORKSHOP
July 31, 2008 @Ridge Vineyards; 18100 Monte Bello Road, Cupertino, CA 95014
Focus = **Risk Management** pertaining to water conservation/quality & pests)

Audience: Santa Cruz Mountains Winegrowers
Sponsors: Viticulture Association of the Santa Cruz Mountains, California Sustainable Winegrowing Alliance, CSU-Fresno Center for Irrigation Technology

Funded by grants from USDA Risk Management Agency & CA Department of Pesticide Regulation

AGENDA

9:30 am Sign-In and Refreshments

9:45 am Opening – CA Sustainable Winegrowing Program Update
Joe Browde, California Sustainable Winegrowing Alliance

Segment = Water-Related Regulations

10:00 am Water Issues and Regulations affecting Santa Cruz Mountain Vineyards
Mary Ellen Dick, Ag Water Quality Program Coordinator – Central Coast Ag Water Quality Coalition

Segment = Reduced-Risk Pest Management

10:30 am Integrated Pest Management (non-weed) – Methods and Controls
Laura Breyer, Breyer's Vineyard IPM Services

11:00 am Effective Use of Pest Natural Enemies (incl releases)
David Gates and Caleb Mosley, Ridge Vineyards

11:30 am Under-The-Vine Sustainable Weed Management
John Roncoroni, UC Cooperative Extension

Noon LUNCH

Segment = Management of Water (Conservation & Quality) and Associated Energy

12:30 pm Best Vineyard Practices for Conserving Water
Mark Greenspan, Advanced Viticulture

1:00 pm Maximizing Efficiency of Irrigation Pumping and Drip Systems
Bill Green, CSU-Fresno Center for Irrigation Technology

2:00 pm Tour and Discussion of Ridge Vineyards' Water & IPM Practices
David Gates and Caleb Mosley, Ridge Vineyards

3:00 pm END

2.5 hours of Continuing Education Credits for Pesticide Applicators and PCAs

Sustainable Grape Growing Workshop

December 11, 2008, 7:00 A.M. – 1:00 P.M.
Location: California State University – Fresno
Fresno State Agricultural Sciences Building – Ag 109 Classroom

Sponsored by:

San Joaquin Valley Winegrowers, California State University – Fresno Viticulture & Enology Department & California Sustainable Winegrowing Alliance

7:00 a.m. REGISTRATION and COFFEE

7:30 a.m. Welcome and Program Summary
Peter Vallis, *San Joaquin Valley Winegrowers*
Joe Browde, *CA Sustainable Winegrowing Alliance*

8:00 a.m. Farm Labor Contractor Issues
Gilbert Molina, California Association of Agriculture labor (CAAL)

8:30 a.m. Optimizing New Pesticides for Integrated Pest Management Programs
Steve Quashnick, *Wilbur-Ellis*

9:00 a.m. Air Quality and Pesticides – Updated Regulations and Mitigation Tactics
Randy Segawa, *CA Department of Pesticide Regulation*

9:30 a.m. Greenhouse Gases and Vineyards – Understandings and Management
Kerri Steenwerth, *USDA-ARS & University of California – Davis*
Joe Browde, *CA Sustainable Winegrowing Alliance*

10:00 a.m. BREAK and REFRESHMENTS

10:10 a.m. Successfully Balancing Five Key Steps in Canopy Management
Kaan Kurtural, *California State University - Fresno*

10:50 a.m. Economic Considerations for Mechanically Managing Grapevine Canopies
Robert Wample, *California State University - Fresno*

11:45 a.m. In-the-vineyard Demonstration of Mechanical Canopy Management

12:15 p.m. LUNCH

1.5 Hours of Continuing Education Credits for Pesticide Applicators and PCAs

Funding support by USDA-Risk Management Agency, CA Dept of Pesticide Regulation, Wine Institute, & California Association of Winegrape Growers

March 2009 Grape Grower Tailgate Meetings

Sponsored by San Joaquin Valley Winegrowers Association & California Sustainable Winegrowing Alliance
Funded in part by a grant from the California Department of Pesticide Regulation

Tuesday, March 10	Cacciatore Fine Wines 1875 S Elm St, Pixley, CA 93256
Wednesday, March 11	San Joaquin Wine Company (Deniz Packing Shed) 21801 Avenue 16, Madera, CA 93637
Thursday, March 12	Yonan Farms NE Corner of Foote & Keyes Rd (1/16 mile west of 99), Ceres, CA 95328

AGENDA (identical per date)

9:00 a.m.	**Registration and Introduction** Peter Vallis, San Joaquin Valley Winegrowers
9:15 – 9:35 a.m.	**Achievements and Focus – Sustainable Grape Growing in the San Joaquin Valley** Joe Browde, California Sustainable Winegrowing Alliance
9:35 – 10:20 a.m.	**Nematodes: Diagnosis and Management in Grapes &** **Preplant Soil Fumigants: Rules, Regulations, and Availability** Michael McKenry, University of California Cooperative Extension
Break	
10:25 – 11:10 a.m.	**Monitoring Tools for Judicious Irrigation Decision-Making** Ron Brase, California AgQuest Consulting Stan Grant, Progressive Viticulture
11:10 – 11:45 a.m.	**Market Outlook for Grape Concentrate and Wine** Greg MaGill, Ciatti Company
11:45 a.m. – Noon	**On-Site Vineyard Practices – Pest Management and Quality Winegrowing** Host Grower

FREE LUNCH provided by Deerpoint Group, Inc.

1.5 Hours of Continuing Education Credits for Pesticide Applicators and PCAs

To RSVP or for more information contact San Joaquin Valley Winegrowers at:
559-354-1409 or rbron@sjvgrapes.org

April 2009 Grape Grower Tailgate Meetings

Sponsored by San Joaquin Valley Winegrowers Association & California Sustainable Winegrowing Alliance
Funded in part by a grant from the California Department of Pesticide Regulation

Tuesday, April 28	Wilson Ag 29736 Fresno Avenue, Shafter, CA 93263
Wednesday, April 29	James Unti Farms 12501 Road 20 (East side between Aves 12 & 13), Madera, CA 93637
Thursday, April 30	Duarte Ranch 6743 Dusty Lane (between Wellsford & Albers Rds), Modesto, CA 95357

AGENDA (identical per date)

9:00 a.m.	**Registration and Introduction** Peter Vallis, San Joaquin Valley Winegrowers
9:15 – 9:30 a.m.	**Achievements and Focus – Air Quality in the San Joaquin Valley** Joe Browde, California Sustainable Winegrowing Alliance
9:30 – 10:00 a.m.	**Update on Air Quality Regulations and Their Implementation** Johnnie Siliznoff, USDA-Natural Resources Conservation Service
10:00 – 10:30 a.m.	**Sustainable Mite Management Strategies and Tactics** Kip Green, Britz
Break	
10:35 – 11:05 a.m.	**Heat Stress: Practical Ways to Follow Regulations and Protect Workers** Jack Passarella, The Zenith
11:05 – 11:40 a.m.	**Grape Market Update** Jeff Bitter, Allied Grape Growers
11:40 – Noon	**On-Site Vineyard Practices – Pest Management and Quality Winegrowing** Host Grower

FREE LUNCH provided by Deerpoint Group, Inc.

1.5 Hours of Continuing Education Credits for Pesticide Applicators and PCAs

To RSVP or for more information contact San Joaquin Valley Winegrowers at:
559-354-1409 or rbron@sjvgrapes.org

12 th Annual IPM Seminar

Mendocino College, Ukiah California
November 13, 2009
8am – 4pm
Location: The Lodge at Blue Lakes, Blue Lakes, Lake County
C.E. Hours requested from DPR 2 hr L&R, 5 hrs other

Contact Person: **Jim Xerogeanes,**
jxerogea@mendocino.edu
(707) 468-3148 office
(707) 972 -3139 cell

Steve Hajik	**Agric. Comm. Lake County**	**Update on Laws and Regulations**	**8:00-9:00 am**
Lisa Francioni	**Wine Institute Project Manager**	**California Sustainable Winegrowing Program and Certification**	**9:00 – 9:30am**
Minghua Zhan	**Department of Land, Air and Water Resources, UC Davis**	**PURE - Pesticide Risk Decision Support Tool**	**9:30am – 10:00am**
Paul Anamosa Ph. D	**Soil Scientist and Viticulturist**	**Organic Fertilizers: Improving their effectiveness by understanding their chemistry**	**10:00 – 11:00am**
Kent Daane UC Kearney Experiment Station	**Kearney Agricultural Center**	**Impact of invasive species on grape management in Calfiornia**	**11:00am -12:00pm**
Lucia Varela, Ph.D.	**North Coast IPM Advisor, UCCE**	**Leafrollers in California Vineyards: Omnivorous Leafroller, Orange Tortrix, LBAM and European Grape Berry Moth identification and management**	**1:00 – 2:00pm**
Kim Horton	**Sterling Insectaries**	**Proper application and use of biological control arthropods**	**2:00 – 3:00pm**
Doug Gubler, Ph.D.	**UC Davis Plant Pathology lab**	**Bot Canker of grapevine**	**3:00 – 4:00 Pm**

The Livermore Valley Winegrowers Association invites you to our first Grower Tailgate, **a NEW bi-annual educational series geared towards growers in the Livermore Valley**. Grower Tailgates will be led by industry experts and provide an informative platform for growers to exchange vineyard information with their peers.

January 7, 2010

8:30am – Noon

Deer Ridge Vineyards

1828 Wetmore Rd., Livermore CA

TOPIC: Sustainable Weed & Pest Management*

Hosted by the California Sustainable Winegrowing Alliance, UC Cooperative Extension, and the Livermore Valley Winegrowers Association.

AGENDA FOR JANUARY 7, 2010

8:30 AM	Registration & Refreshments (Bagels and Coffee)
9:00-9:15	CA Sustainable Winegrowing Program Update *Presenter: Joe Browde, CA Sustainable Winegrowing Alliance*
9:15-10:00	Under-The-Vine Sustainable Weed Management *Presenter: John Roncoroni, UC Cooperative Extension*
10:00-10:45	Integrated Pest Management (non-weed) – Methods and Controls *Presenter: Laura Breyer: Pest Control Advisor*
10:45-11:00	Break
11:00-11:30	Livermore Valley Pest Management Challenges and Resolutions *Presenters: Bryan Anthony (Wente Vineyards) & Mike Wanless (Wisner Vineyards)*
11:30-12:00	"Hot Topic" Pest Issues for Livermore Valley *Presenter: Bob Blumenthal, Alameda Country Agricultural Department*
12:00 – 12:30	Tour of Vineyard (weather permitting) *Guides: Bryan Anthony (Wente Vineyards) & Carl Lyle (Deer Ridge Vineyards)*

Pending – 2.5 Hours of Continuing Education Credit for Pesticide Applicators and PCA's

* This Grower Tailgate is funded in part by a grant from the CAL Department of Pesticide Regulation

RSVP is Mandatory. RSVP at www.LVwine.org/calendar or call the office (925) 447-9463.

FREE for LVWA members. $20 for non-members.

Livermore Valley Winegrowers Association ⁕ 3585 Greenville Road, Suite 4 ⁕ Livermore CA 94550 ⁕ (925) 447-9463 ⁕ www.LVwine.org

Innovative Grape Growing Solutions Workshop
January 20, 2010 from 7:30 am – 5:00 pm
California State University – Fresno, Fresno, CA 93740
Agenda in DPR-desired format for CEU submission

CE Hrs Requested	**Time**	**Speaker/Affiliation**	**Title/Topic & How it Relates to Pest Management or Pesticides**	**% of Time Related to Pest Management or Pesticides**
0	7:30 am – 7:50 am	NA	Registration	NA
0	7:50 am – 8:00 am	Joe Browde, CA Sustainable Winegrowing Alliance	Welcome & Acknowledgements	0%
1.0 hr **O**	8:00 am – 9:00 am	Andrew Landers, Cornell University	Optimizing Spray Applications for Grape Growers; tactics for ensuring on-target pesticide deposition	100%
0	9:00 am – 9:30 am	Carrie Ayon & Susan Hatmaker, Sutton-Hatmaker Law Firm	Contract Employment Law Updates for Growers	0%
0	9:30 am – 10:00 am	Selen Eryuce, Turkish Consulate Commerce Attache	The Turkish Commerce Market – Setting Raisin Prices	0%
0	10:00 am – 10:10 am	NA	Break	NA
0	10:10 am – 10:40 am	Jennifer Hashim-Buckey, UC Cooperative Extension	Potassium Impacts on Maturity and Yield	0%
0	10:40 am – 11:10 am	Lisa Francioni, CA Sustainable Winegrowing Alliance	Sustainable Winegrowing and Certification	0%
0	11:10 am – 11:30 am	NA	Walk to vineyard for equipment displays & demos	NA
0.5 hr **O**	11:30 am – 1:10 pm	Vineyard equipment vendors	Lunch + 1.0 hr Vineyard Equipment Session: Displays & Demos	50% of 1.0 hr equipment time pertinent to pesticide spraying and weed management
0	1:10 pm – 1:30 pm	NA	Walk to building for continued seminars	NA
0.75 hr **O**	1:30 pm – 2:15 pm	Kent Daane, UC Cooperative Extension	Vine Mealybug: Pest Status & Management	100%
0.5 hr **O**	2:15 pm – 2:45 pm	Stephen Vasquez, UC Cooperative Extension	Moth Pests: Threats, Identification, & Control	100%
0.33 hr **O**	2:45 pm – 3:05 pm	Kim Gallagher Horton, Sterling Insectary	Effectively Managing Natural Enemy Releases; releases and	100%

			efficacy of predacious mites & insects	
0	3:05 pm – 3:15 pm	NA	Break	NA
0	3:15 pm – 3:45 pm	John Williamson, PureSense	Irrigation & Water Conservation	0%
0	3:45 pm – 4:15 pm	Robert Wample, Soil Topography & Information Systems	Precision Soil Mapping & Why	0%
0	4:15 pm – 5:00 pm	Emilio Miranda, Allied Grape Growers, Greg Berg, Oxbo, Manuel Huizar, Table Grape Grower, Steve Spate, Raisin Bargaining Association	Crop Load Objectives & Management Panel	0%

March 2010 Grape Grower Tailgate Meetings

Sponsored by San Joaquin Valley Winegrowers Association & California Sustainable Winegrowing Alliance
Funded in part by a grant from the California Department of Pesticide Regulation

Tuesday, March 9	ASV Wines 31502 Peterson Road McFarland, CA 93250
Wednesday, March 10	Mission Bell Winery 12667 Road 24 Madera, CA 93637
Thursday, March 11	McManis Family Vineyards & Winery 18700 East River Road Ripon, CA 95366

AGENDA (identical per date)

9:00 a.m.	**Registration and Introduction** Peter Vallis, San Joaquin Valley Winegrowers, and Joe Browde, California Sustainable Winegrowing Alliance
9:10 – 9:40 a.m.	**Rules for and Practically Managing Heat Stress** Jack Passarella, The Zenith (arranged and supported by United Valley)
9:40 – 10:10 a.m.	**Technology for Tracking Farming Activities (including pest management)** Cliff Ohmart, SureHarvest
10:10 – 10:30 a.m.	**Movento – Registration and Management Update** Tim Sitton, Bayer Crop Science
Break	
10:40 – 11:10 a.m.	**How Pest-Based Quarantines Work and Implications for San Joaquin Valley grapes** County Ag Commissioners (arranged by California Department of Food & Agriculture)
11:10 – 11:40 a.m.	**Water Quality for Agricultural Irrigation** Deborah Miller, Deerpoint Group
11:40 – Noon	**On-Site Pest Management & Tour of Crush – what happens to your grapes** Host Grower/Winemaker

The Famous SJVWA Gourmet BBQ Lunch to Follow

1.5 Hours of Continuing Education Credits for Pesticide Applicators and PCAs

To RSVP or for more information contact San Joaquin Valley Winegrowers at:
559-354-1409 or rbron@sjvgrapes.org

PEST MANAGEMENT WARM UP
March 31, 2010, 8:30-11:30 a.m.
Big Valley Grange, 1510 Big Valley Rd. Lakeport

AGENDA

8:30-9:00 a.m. Registration, coffee, pastries

9:00-9:45 a.m. Introducing Sustainability Metrics and the Pesticide Risk Mitigation Engine, PRiME. Joe Browde, California Sustainable Winegrowing Alliance, and Cliff Ohmart, SureHarvest, will explain how metrics are a valuable tool for sustainability guidance. They will also introduce PRiME, a pesticide risk calculator developed by the IPM Institute of North America.

9:45-10:15 a.m. Leafhoppers from the ground up. A panel of North Coast PCAs, Laura Breyer, Breyer's Vineyard IPM Services, Jeff Gleaves, Ag Unlimited, and Randy Krag, Beckstoffer Vineyards Red Hills, will discuss integrated pest management for leafhoppers, including vine nutrition, canopy management, and how to decide when control is necessary. The PCAs will discuss their experiences with conventional and organic leafhopper materials.

10:15-11:00 a.m. Sustainabile undervine weed management John Roncoroni, UC Cooperative Extension Weed Science Advisor, will cover both conventional and organic weed management, including both chemical and non-chemical options.

11:00-11:30 a.m. How does agriculture affect Clear Lake Water Quality? Members of the public often have strong, but unsubstantiated opinions about how farming practices influence Clear Lake. After several years working in the Lake County Public Works Division of Water Resources, Erica Lundquist will summarize what is currently known on this topic

The Livermore Valley Winegrowers Association invites you to our Grower Tailgate Meeting. Bi-annual Grower Tailgates take place indoors and are led by industry experts, providing an informative platform for growers to exchange vineyard information with their peers.

April 20, 2010

8:30am – Noon

Deer Ridge Vineyards
1828 Wetmore Rd., Livermore CA

TOPIC: Irrigation Decision Making & New Pest Threats*

Hosted by the California Sustainable Winegrowing Alliance, UC Cooperative Extension, and the Livermore Valley Winegrowers Association.

AGENDA FOR TUESDAY, APRIL 20

8:30 AM	Registration & Refreshments (Bagels and Coffee)
9:00-9:45	CA Sustainable Winegrowing Program Update & Certification *Presenters: Lisa Francioni and Joe Browde, CA Sustainable Winegrowing Alliance*
9:45-10:45	Irrigation Decision Making & Best Practices *Presenter: Mark Greenspan, Advanced Viticulture LLC*
10:45-11:00	Break
11:00-11:30	Light Brown Apple Moth – Regulatory Implications, ID Biology & Management *Presenters: Bob Blumenthal, Alameda County Agricultural Department* *Janet Caprille, UC Cooperative Extension*
11:30-12PM	European Grapevine Moth – Regulatory Implications, ID Biology & Management *Presenters: Bob Blumenthal, Alameda County Agricultural Department* *Janet Caprille, UC Cooperative Extension*

Pending – 1.5 Hours of Continuing Education Credit for Pesticide Applicators and PCA's

** This Grower Tailgate is funded in part by a grant from the CAL Department of Pesticide Regulation*

RSVP Mandatory before 1/4/10. RSVP at www.LVwine.org/calendar or call LVWA office.

FREE for LVWA members. $20 for non-members.

Livermore Valley Winegrowers Association ⁕ 3585 Greenville Road, Suite 4 ⁕ Livermore CA 94550 ⁕ (925) 447-9463 ⁕ www.LVwine.org

April 2010 Grape Grower Tailgate Meetings

Sponsored by San Joaquin Valley Winegrowers Association & California Sustainable Winegrowing Alliance
Funded in part by grants from the California Department of Pesticide Regulation and USDA Natural Resources Conservation Service

Tuesday, April 27	Equinox Tree & Vine 208 Ranch ½ Mile North of Ave 112 on Road 208 Terra Bella, CA 93720
Wednesday, April 28	Ranch Holdings 5 27522 Avenue 11 (Just east of HWY 145) Madera, CA 93637
Thursday, April 29	Jackson-Rodden Ranches 4000 Ellenwood Road Oakdale, CA 95361

AGENDA (identical per date)

9:00 a.m.	**Registration and Introduction** Peter Vallis, San Joaquin Valley Winegrowers, and Joe Browde, California Sustainable Winegrowing Alliance
9:10 – 9:40 a.m.	**Financial Services (Estate Planning, Life, Disability and Health)** Leanne Williams, United Valley
9:40 – 10:10 a.m.	**Chilean Earthquake and You: The World Wine Market Update** Ciatti Company & Allied Grape Growers Tag-Team
10:10 – 10:30 a.m.	**Introducing Sustainability Metrics – What's in It for Me?** Cliff Ohmart, SureHarvest
Break	
10:40 – 11:10 a.m.	**Air Quality Update – Regulations, Implementation, and Cost-Share** Johnnie Siliznoff, USDA Natural Resources Conservation Service
11:10 – 11:40 a.m.	**Making Natural Enemy Releases Work – Discussion & Demonstration** Kim Gallagher Horton, Sterling Insectary
11:40 – Noon	**On-Site Grower Testimonial & Innovative Practices (focus pest management)** Host Grower

The Famous SJVWA Gourmet BBQ Lunch to Follow

1.5 Hours of Continuing Education Credits for Pesticide Applicators and PCAs

To RSVP or for more information contact San Joaquin Valley Winegrowers at:
559-618-1856 or rbron@sjvgrapes.org